

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7

KNYAZEV, A.P., insh.

Measurement of the transformation coefficient of large high-voltage transformers. Elek. sta. 35 no.12172-73 D 166.
(MIRA 1612)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7"

KNYAZEV, A.S.

KNYAZEV, A.S., Cand Tech Sci -- (diss) "Study of electrical characteristics of certain lineal antennae placed above a semiconductor ground." Mos, 1958. 13 pp with graphs (Central Sci Res Experimental Order of Red Star Inst of Communications im K.Ye Voroshilov). Bibliography 13 pp (12 titles) (KL, 20-58, 97)

KNIAZEV, A. S.

A. S. KNIAZEV: "Computation of the input impedances of certain linear antennas dispersed over a semiconducting earth." Scientific Session Devoted to "Radio Day", May 1958, Trudrezervizdat, Moscow, 9 Sep. 58

The widely known method of induced emf's is used in the case of linear conductors which are dispersed over a semiconducting earth. Using this method, computational formulas are obtained to calculate the input impedances of antennas whose elements consist of vertical and horizontal conductors with a harmonic current distribution.

The impedances of the upper and lower halves of the dipole are calculated separately for a symmetric vertical dipole, which permits the impedance asymmetry specified by the different effect of the earth of the halves of the dipole to be determined.

A computation is made of the impedance of a horizontal symmetric dipole (VG antenna).

The computational formulas permit both the intrinsic impedance of a symmetric dipole and the impedance induced by an adjacent parallel symmetric dipole of arbitrary length to be calculated.

The fundamental theoretical statements are verified by experiment. Verification showed a completely satisfactory agreement between computed and experimental results, which permits the hope that the computational formulas will be applicable for engineering practice.

83151

S/108/60/015/009/003/008
B002/B067

9.1700

AUTHOR:

Knyazev, A. S., Member of the Society

TITLE:

Technical Calculation of the Resistances of Linear Conductors by Taking Into Account the Real Grounding

PERIODICAL:

Radiotekhnika, 1960, Vol. 15, No. 9, pp. 21-32

TEXT: The resistance of an antenna which is near the ground constitutes a complex function of frequency, structure of the antenna, and the electrical properties of the ground. The results of experimental determinations are unsatisfactory for practical use. B. V. Braude developed a method of theoretical calculation which, however, is not generally used. The method of applied emf offers another possibility of calculation. Karson, Vays and Titov laid the foundation of this method. In the present paper, this method is used to compute linear conductors and most simple systems above a ground with real electric properties. A formula is deduced (55) giving the mutual resistance of two conductors one of which runs perpendicular, the other parallel to the ground. An appendix (Table) presents a number of values calculated from this formula.

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Technical Calculation of the Resistances of
Linear Conductors by Taking Into Account the
Real Grounding

3/108/60/015/009/003/008
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To check the results, some measurements were made in the ultra-short wave range. These measurements were made together with K. P. Kharchenko. The results are shown in the diagrams of Figs. 4-7. Their comparison with the theoretical results by I. M. Baranov (Ref. 3) shows a qualitative agreement for $h > 0.1\lambda$ (h denotes the height of the antenna). The results presented here prove that the formulas can be technically used. Papers by I. F. Dobrovolskiy and I. M. Baranov are mentioned. The author thanks G. Z. Aysenberg, L. S. Korol'kevich, O. A. Lavrov, and S. I. Nadenenko for a discussion of the paper. There are 7 figures, 1 table, and 13 references: 6 Soviet, 3 German.

✓

SUBMITTED: June 18, 1959

Card 2/2

SEARCHED INDEXED SERIALIZED FILED
REF ID: APE025692

INVENTOR: Kovalev, V. S.

ORG: none

TITLE: Wide-band dummy dipole antenna. Class 21, No. 174676

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 18, 1965, 40

TOPIC TAGS: dipole antenna, antenna configuration

ABSTRACT: The proposed wide-band dummy dipole antenna consists of a section of coaxial line with a helical inner conductor made of a high-resistance alloy. The external conductor is a screen provided with apertures. This configuration increases the level of the dissipated power and provides for accurate reproduction of dipole antenna input impedance within a wide frequency range. Orig. art. has: 1 figure.
[DW]

SUB CODE: EC/ SUBM DATE: 04Dec62/ ORIG REF: 000/ OTH REF: 000/ ATD PRESS: 412

Card 1/1

UDC: 621.396 674.3

L 25648-66

ENT(d)/ENT(1)/MEG(k)-2/T

Monograph

ACC NR: AM6011527

UR/ 61

49

Bt

Lavrov, Georgiy Aleksandrovich; Knyazev, Aleksey Semenovich

Surface and underground antennas¹⁵⁸ theory and use of antennae placed near the earth's surface (Prizemnyye i podzemnyye antenny; teoriya i praktika antenn, razmeshchennykh vblizi poverkhnosti Zemli). Moscow, Izd-vo "Sovetskoye radio", 1965. 472 p. illus., biblio. Errata slip inserted. 6800 copies printed.

TOPIC TAGS: antenna theory, antenna gain, dipole antenna, antenna, antenna configuration, antenna engineering

PURPOSE AND COVERAGE: This book is intended for technical personnel concerned with the theory and use of antennas and could be useful to students taking related courses at schools of higher education. The book discusses the results of theoretical and experimental investigations dealing with linear antennas located in the vicinity of the air-ground interface. The main emphasis is placed on methods of calculating surface and underground antennas which take into account the actual electrical parameters of the soil. In addition, the mutual and natural impedances of linear a radiator are dealt with by taking the effects of semiconductor media into account. The

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UDC 621.396.671

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book contains a certain amount of experimental material discussing mobile-radio-system antennas for the short- and meter-wavelength bands. The experimental determination of the basic electrical parameters of these antennas and problems connected with their power supply are reviewed. The authors state that in the accomplishment of their work they owe a great deal to Professors A. A. Pistol'kore, L. S. Korol'kevich, G. S. Avzenberg, and B. V. Braude. They also thank V. I. Beketov, V. O. Buryak, S. V. Solov'yev, I. G. Tumilovich, N. K. Ukrainskiy, K. P. Kharchenko, and A. R. Kochek for their assistance.

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SUB CODE: 09/ SUBM DATE: 20Nov65/ ORIG REF: 054/ OTH REF: 106

Card 6/6 FV

L 00236-67 EWT(m)/EWP(w) IJP(c) MM/EM

ACC NR: AP6029540

(N)

MM

SOURCE CODE: UR/0046/86/012/003/0382/0384

AUTHOR: Knyazev, A. S.; Tartakovskiy, B. D.

ORG: Acoustics Institute, AN SSSR, Moscow (Akusticheskiy institut AN SSSR)

TITLE: Use of electromechanical feedback for damping the vibrations and radiations of plates

SOURCE: Akusticheskiy zhurnal, v. 12, no. 3, 1966, 382-384

TOPIC TAGS: vibration damping, flexural vibration, phase shifter

ABSTRACT: Results are presented of the application of a two-channel compensating system for attenuating the resonant flexural oscillations of plates and of the associated noise. In the proposed system, the signal from the vibration sensor is filtered, amplified at one of the resonant frequencies, and fed through a phase shifter to two vibrators. In exactly the same way, oscillations at another resonant frequency are filtered by another filter and are fed through the same vibrators and through another phase shifter. By controlling the phase and gain, it is possible to achieve a decrease in the amplitude of flexural oscillations of a plate at two resonant frequencies simultaneously. By increasing the number of channels, it is possible to increase the number of simultaneously compensated resonances. The test results show that the average level of sound pressure in the space close to the plate, at resonant frequencies, is

UDC: 534-16/534.283

Card 1/2

L 06236-47

ACC NR: AP6029540

decreased by approximately the same degree as the average level of vibrations, i. e.,
by 10-20 db. Orig. art. has: 3 figures.

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SUB CODE: 20/ SUBM DATE: 03Dec64/ ORIG REF: 002/ OTH REF: 001

Card 2/2 *AB*

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7

KNYAZEV, A. S. (Engineer)

"Investigation Into Possibilities for Increasing the Efficiency of Automobile Engines by Intensifying the Ignition." Thesis for degree of Cand. Technical Sci. Sub 26 May 50, Moscow Automotive Mechanics Inst.

Summary 71, 4 Sep 52, Dissertations Presented for Degrees in Science and Engineering in Moscow in 1950. From Vechernaya Moskva, Jan-Dec 1950.

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7"

3/019/61/000/012/065/121
A152/A128

AUTHORS: Knyazev, A.T., Vinnik, A.I., and Kulakov, N.N.

TITLE: A method of recording magnetically on steel cables

PERIODICAL: Byulleten' izobreteniy, no. 12, 1961, 45

TEXT: Class 42d, 330. No. 139093 (673209/26 of July 12, 1960).
A method of recording magnetically on steel cables of an elevator, incorporating a photoelectric reader-recorder, differing from others in that for the obtainment of very precise recordings one records on steel cable a standard program, recorded, for example, on a perforated tape, by means of rotating the drum with the standard program from the elevator's shaft, having superposed in advance the zero program position with the initial position of the vessel.

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CIA-RDP86-00513R000723330006-7

KNYAZEV, A.T., inzh.; VINYIK, A.I., inzh.

Depth indicator for hoisting machinery with friction pulleys.
Bezop.truda v prom. 5 no.12:21-22 D '61. (MIRA 15:1)

1. Dongiprouglemash.
(Mine hoisting--Safety appliances)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7"

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CIA-RDP86-00513R000723330006-7

KHIAZEV, A.T.

Magnetic VM2E-type switch operating as pick-up and cutout.
Ugol' Ukr. 4 no.2:31 P '60. (MIRA 13:6)
(Electricity in mining) (Mine haulage)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7"

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7

KHYZEV, A.T.; VIMNIK, A.I.; KULAKOV, N.N.

Control of the rotation direction of the hoist. Ugol' Ukr. 5 no.57
17-18 My '61.
(MIRA 1415)

1. Donyiprougash.
(Hoisting machinery) (Automatic control)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7"

YUZHANINOV, I.A.; TELYATNIKOV, O.V.; BEKHTEV, O.I.; KNYAZEV, A.T.;
KOROLEVA, A.A.

Testing a three-chamber fluidized bed cooler for the cooling of
alumina. Isvet. met. 36 no.6:50-55 Je '63. (MIRA 16:7)

(Fluidization-Cooling)
(Aluminum oxide-Cooling)

BCS

KNYAZEV, A.Z.

*Mining Preparation,
Laying*

1973. *New types of mineral resources.—A. Z. KNYAZEV (Sov. Krem., N. No. 2, 10, 1961).* A method of manufacturing mineral moulds from purified crushed quartz sand and steel rods (5-10 mm. dia.) is described in detail. The new mineral moulds are used to manufacture the sand by the methods described above the special soil. When, when the required amounts of mineral materials is required during the year not sufficient and last for 1,000-2,000 moulds. It cannot be compared with mineral moulds, with conserve the cost much less can be estimated very easily.

KNTAZEV, B., glavnyy tekhnolog

Reconstruction of existing standard swine houses. Sel.stroi. 14
no.6:16-19 Je '59. (MIRA 12:9)

1. Institut "Rosagipresovkhozstroy".
(Swine houses and equipment)

KNYAZEV, B.; SELIZNEV, N., insh.

Cowbarn for 400 head with storage of ensilage inside the building.
Sel'. strct. 16 no.1; insert 47 Ja '62. (MIRA 16:1)

1. Glavnyy tekhnolog instituta "Razgiprosel'khostroy" (for
Knyazev).

(Dairy barns)

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7

KNYAZEV, B.O. (Moskva)

Sewing machine attachment for piping piping from warp
fabrics. Shvein. prom. no.: 33-34- Ja-F '65. (MIRA 1814)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7"

KNYAZEV, B.M.

PHASE I

BOOK

Author: Knyazev, B.M. and Polishchuk, K.E.
Full Title: AIRCRAFT EQUIPMENT

Transliterated Title: Oberudovanie samoletov
Publishing Data

Originating Agency: None.

Publishing House: State Publishing House of Defense Industry (Oberongis)
Date: 1952. No. pp.: 463

Call No.: T1697.A1K5

No. of copies: Not given.

Editorial Staff:

Editor: Melkotrodrovyi, N.A.

Ed.-in-Chief: None.

Tech. Ed.: Chistjakov, N.I.

Appraiser: None.

Text Data

Coverage: The first post-war textbook on the latest aircraft equipment and instruments. Table of contents: Ch. 1: Historical survey and classification of aircraft equipment. Ch. 2: Basic requirements for aircraft equipment. Ch. 3: Electrical aircraft equipment. Ch. 4: Aeronautical radio equipment and facilities. Ch. 5: Hydraulic and pneumatic aircraft equipment. Ch. 6: Navigation instruments and mechanical pilots. Ch. 7: Navigation and computing instruments; and, automatic navigation devices. Ch. 8: Instruments and automatic devices for aircraft engines. Ch. 9: High altitude aircraft equipment. Ch. 10: Aircraft safety equipment. Ch. 11: Phototechnical means of reconnaissance and topographical survey. Photos. Diagrams.

(cont. 1/2)

Oborudovanie samoletov

Call No.: TL697.A1K3

Purpose: A textbook for students of aeronautical institutions of higher learning.
Facilities (personalities and institutions with location): Moscow Aviation Institute (im. S. Ordzhonikidze).

No. Russian and Slavic References: 19.

Available: Library of Congress,

(contd. 2/2)

5.5700 (1208, 1273, 1274)

S/076/61/035/003/013/023
B121/B203

AUTHOR: Knyazev, D. A.

TITLE: Calculation of isotope separation factors in ion exchange

PERIODICAL: Zhurnal fizicheskoy khimii, v. 35, no. 3, 1961, 612-619

TEXT: The author developed a method of calculating the isotope separation factors in ion exchange in solutions of strong electrolytes. The displacement reaction between the lighter and the heavier isotope depends on the size of the crystallochemical ion radii. The separation factors of isotopic ions in ion exchange can be determined from the crystallochemical isotope radii. The exchange of the heavier isotope for a lighter one widens the crystal lattice of the salt, which may also be achieved by a temperature increase of the salt by ΔT . If ΔT , the ion radii of anion and cation, and the temperature coefficient B for the single crystal of the respective salt are known, the difference Δr of the radii of the two isotopic ions may be calculated: $\Delta r = (r_K + r_A) \Delta T / B$ (3). The change in the isotope radius by Δr involves a change in the selectivity coefficient:

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Calculation of ...

S/076/61/035/003/013/023
B121/B203

$\Delta K_r = K'(r)\Delta r$. The ratio α of the selectivity coefficients of the lighter and the heavier isotope is given by:

$$\alpha = \frac{K_r + \Delta K_r}{K_r} = \frac{K_r + K'(r)\Delta r}{K_r} = 1 + \frac{1}{K_r} (\frac{\partial K}{\partial r})_r \Delta r. \text{ With } \alpha - 1 = \epsilon, \text{ the equation obtains the form}$$

$$\epsilon = \frac{1}{K_r} (\frac{\partial K}{\partial r})_r \Delta r \quad (2). \text{ The author calculated the differences of crystallo-}$$

chemical ion radii for various isotopes of alkali metals, alkaline-earth metals, and halogens. Results are given in Table 1. Ion exchange systems consisting of organic ion exchangers and solutions of strong electrolytes were found to show very low isotopic effects. Lighter isotopes concentrate on the ion-exchange resin. The isotope separation factor strongly rises with increasing cross linkage of the exchanger, and strongly drops with increasing mass of the element to be separated. Therefore, the separation of isotopes by ion exchange is most efficient in the case of multivalent ions of small masses. The author thanks Professor G. K. Boreskov and Docent

Card 2/3

Calculation of ...

S/076/61/035/003/013/023
B121/B203

N. Ye. Khomutov for assistance. There are 2 figures, 5 tables, and 19 references: 2 Soviet-bloc and 17 non-Soviet-bloc. The four most recent references to English-language publications read as follows: E. Glueckauf, B. Kitt, Proc. International Symposium on Isotope Separation, Amsterdam, '58, p. 210; F. Menes, E. Saito, E. Roth, Proc. International Symposium on Isotope Separation, Amsterdam, 1958, p. 227; E. Glueckauf, Trans. Faraday Soc., 54, 1203, 1958; Lee, Begun, J. Amer. Chem. Soc., 81, 2332, 1959.

ASSOCIATION: Khimiko-tehnologicheskiy institut im. D. I. Mendeleyeva Moskva
(Institute of Chemical Technology imeni D. I. Mendeleyev, Moscow)

SUBMITTED: July 6, 1959

Legend to Table 1:
(1) isotope.

$\textcircled{1}$ Isotope	Ar. A	$\textcircled{2}$ Isotope	Ar. A	$\textcircled{3}$ Isotope	Ar. A
$^6\text{Li} - ^7\text{Li}$	$5,0 \cdot 10^{-4}$	$^{40}\text{Ca} - ^{40}\text{Ca}$	$0,9 \cdot 10^{-4}$	$^{177}\text{Y} - ^{177}\text{Y}$	$1,4 \cdot 10^{-4}$
$^{23}\text{Na} - ^{23}\text{Na}$	$4,8 \cdot 10^{-4}$	$^{40}\text{Mg} - ^{40}\text{Mg}$	$3,3 \cdot 10^{-4}$	$^{36}\text{Cl} - ^{36}\text{Cl}$	$1,9 \cdot 10^{-4}$
$^{39}\text{K} - ^{39}\text{K}$	$1,5 \cdot 10^{-4}$	$^{40}\text{Ca} - ^{40}\text{Ca}$	$4,6 \cdot 10^{-4}$	$^{76}\text{Br} - ^{76}\text{Br}$	$3,7 \cdot 10^{-4}$
$^{87}\text{Rb} - ^{87}\text{Rb}$	$3,9 \cdot 10^{-4}$	$^{87}\text{Sr} - ^{87}\text{Sr}$	$3,7 \cdot 10^{-4}$	$^{103}\text{I} - ^{103}\text{I}$	$1,1 \cdot 10^{-4}$

Card 3/3

KNYAZEV, D.A. (Moskva)

Calculation of the separation factors of isotopes in amalgam
exchange. Zhur. fiz. khim. 39 no. 1:40-44 Ja '65
(MIRA 19:1)

1. Khimiko-tehnologicheskiy institut imeni D.I. Mendeleyeva,
Moskva. Submitted November 14, 1963.

KNYAZEV, D.A.; MIKHAYLICHENKO, A.I.

Chromatographic method of separating iron isotopes. Zhar.prikl.khim.
35 no.1:66-70 Ja '62. (MIRA 15:1)
(Iron--Isotopes)

KYAZEV, D.A.; SHERBAKOV, I.A.

Exchange of lithium and ammonium ions on the cation exchanger
KU-2 in mixed media. Zhur. neorg. khim. 8 no.7:1766-1769
Jl '63. (MIRA 16:7)

(Ion exchange) (Lithium chloride)
(Ammonium chloride)

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CIA-RDP86-00513R000723330006-7

KNYAZEV, D.A.; BANTYSH, A.N.

Regularities in equilibrium of isotope exchange reactions. Zhur.
fiz. khim. 39 no.5:1068-1074 My '65. (MIRA 18:8)

I. Moskovskiy khimiko-tehnologicheskiy institut imeni D.I.
Mendeleyeva.

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CIA-RDP86-00513R000723330006-7"

S/080/63/036/001/006/026
D226/D307

AUTHORS:

Kavazey, D.A. and Rakov, N.A.

TITLE:

High purification of lithium by elution chromatography

PERIODICAL:

Zhurnal prikladnoy khimii, v. 36, no. 1,
1963, 63 - 66

TEXT:

The present work was aimed at developing a method which would yield, in a single operation, 20-40 mg -eq. Li containing < 0.1 mol.% of alkali metals and not more than 0.01 mol % of other usual contaminants. The method chosen consisted of ion-exchange on a sulfonic acid cationite, eluting the mixture with 0.1 - 1.0 N HCl. Initial experiments showed that the industrial cationite KY-2 (KU-2) was preferable to C8C (SPS). Sharp separations of Li and Na were possible on KU-2 with 1N HCl, the proportion of Na in Li and the rate of flow being relatively noncritical. Suitable column dimensions were a 3000 mm length and 20 mm dia, with resin grain-size of 0.02 - 0.5 mm. The

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High purification of lithium ... 8/080/63/036/001/006/026
D226/D307

column is regenerated by washing with an excess (3.5 l) of 1N HCl. Control experiments showed that good separations of Li and Na could be achieved in this way for 1-4 % Na in Li, and flow rates of 3-10 ml/min. Li was also successfully purified from Na, K, Ca and Fe^{3+} ions on a U-tube consisting of two 1500 mm arms connected at the bottom by a capillary. There are 2 figures and 2 tables.

ASSOCIATION: Moakovskiy khimiko-tehnologicheskiy
institut imeni D.I. Mendeleyeva
(Moscow Chemical and Technological
Institute imeni D.I. Mendeleyev)

SUBMITTED: July 22, 1961

Card 2/2

EWP(q)/EWT(a)/BDS

AFFTC JD

ACCESSION NR: AP3004077

S/0076/63/037/007/1639/1640

53

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AUTHOR: Knyazev, D. A.

TITLE: Chromatographic measurements of the coefficients of lithium
isotope separation during ion exchange

SOURCE: Zhurnal fizicheskoy khimii, v. 37, no. 7, 1963, 1639-1640

TOPIC TAGS: chromatography, lithium, lithium isotope, ion exchange,
LiABSTRACT; The coefficient of separation of a lithium isotope has
been measured chromatographically for three ion exchange systems.
The values obtained are in satisfactory agreement with the literary
data and with the results of theoretical calculations. It was
found that the magnitude of the coefficient of separation depends
upon the degree of binding, structure of the resin, and upon the
temperature. Its absolute value does not exceed 0.004. Chromato-
graphic separation was made in columns of 17-20 mm diameter and
height of 1.5-3 meters. Size of the ion exchange particles in
dry form was 0.10 to 0.22 mm. Orig. art. has: 1 table.

ASSN: MOSCOW TECHNICAL ENGINEERING INSTITUTE.

L 18970-63 EPR/EPF(c)/EWT(n)/BDS AFFTC/ASD/ESD-3 Pa-4/Pr-4 RA/MM/MAY
ACCESSION NR: AP3006627

8/0076/63/037/009/2094/2099

71

AUTHORS: Knyazev, D. A.; Sklenskaya, E. V.

69

TITLE: The separating ability of complexes with respect to lithium isotopes /?

SOURCE: Zh. fizicheskoy khimii, v. 37, no. 9, 1963, 2094-2099

TOPIC TAGS: isotopic exchange equilibrium, lithium complex, ion exchange, nitrilotriacetic chelate, EDTA, lithium

ABSTRACT: Authors present an experimental study on the separating ability of complexes in relation to lithium isotopes. The reactions of isotopic ion exchange between the chelated lithium complexes and aqueous lithium complexes with nitrilotriacetic, EDTA and aminoarbituric-N-N-diacetic have been investigated in aqueous solutions. Their corresponding separation factors were found. The chelate complexes become enriched in ^{6}Li isotope. The direction of enrichment and the sequence of increasing values of the separating factors have been qualitatively explained by the difference in bond strengths of the lithium ion with the functional groups of the chelating agents. The Orig. art. has: 2 tables, 3 figures, and 10 formulas.

ASSN. MOSCOW CHEMICAL ENGINEERING INSTITUTE,
Card 1/1 Physico-chemical Institute.

"APPROVED FOR RELEASE: 06/19/2000

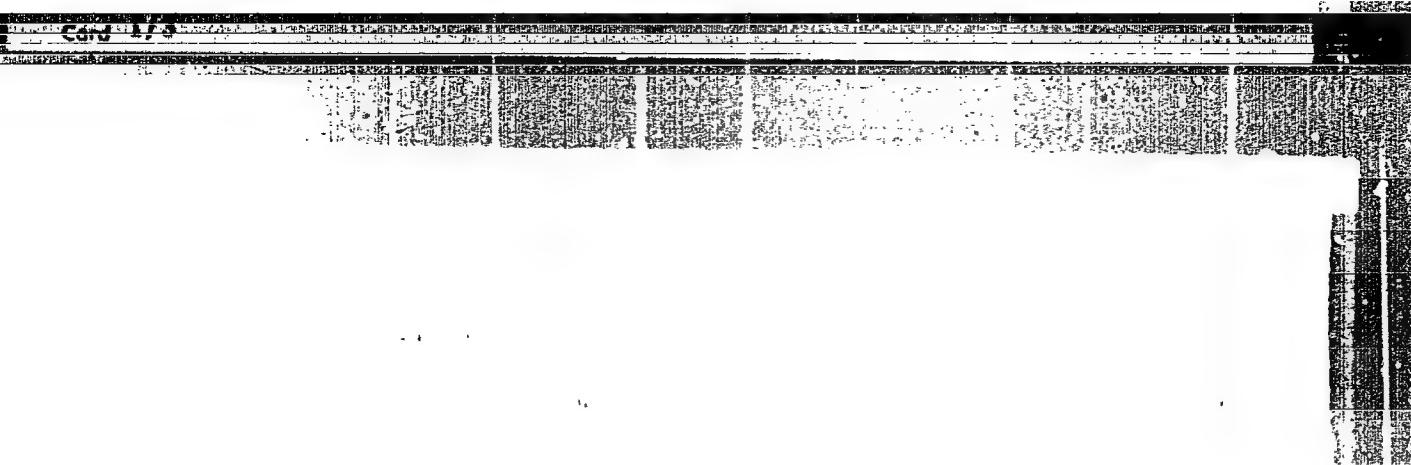
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ASSOCIATION: None

APPROVED FOR RELEASE: 06/19/2000

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APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7"

KNYAZEV, D.A.

Chromatographic method for measuring the factors of separation of substances having closely related properties. Zhur. fiz. khim. 37 no. 5:1190-1193 My '63.
(MIRA 17:1)

1. Moskovskiy khimiko-tehnologicheskiy institut imeni Mendelejeva.

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7

KNYAZEV, D.A.

Study of 5,7-dibromo-8-hydroxyquinoline dissociation by an
extraction method. Zhur. anal. khim. 19 no.3:273-275 '64.
(MIRA 17:9)

1. Moskovskiy khimiko-tehnologicheskiy institut imeni
Mendeleyeva.

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7"

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7

KNYAZEV, D.D.

Portable unit for testing electric meters. Izm.tekh. no.12:49-50
D '61. (MIRA 15:1)

(Electric meters--Testing)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7"

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7

INIAZEV, D.D.

Devices for protecting vibrators from electric current overloads.
Inv. NIIPT no.91298-301 '62. (MIRA 15:12)
(Electric contactors) (Electric protection)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7"

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7

KHYZEV, D.D.

Portable device for testing electric measuring devices. Inv.
NIIP no.8:415-416 '61. (MIRA 15:7)
(Electric meters—Testing) (Electric measurements)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7"

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7

KNYAZEV, D.S.; DOMEROVSKIY, G.Ye.; NELOSTOTSKIY, N.G.

Standardization control in enterprises and organizations of the
Latvian S.S.R. Standartizatsija 27 no.9:35-37 S '63.
(MIRA 16:10)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7"

SUPONITSKIY, Samuil Abramovich; AGAMBROVAN, Abel Gesovich; KOZLOV,
Aleksey Petrovich; KHYZAEV, F.P., red.; GEORGIDZEVA, G.I.,
tekhn.red.

[The seven-year plan as a decisive stage in the contest
between the two systems] Siedmidesnyi plan - reshaiushchii
etap srovnovaniia dvukh sistem. Moskva, Izd-vo Mosk.univ.,
1959. 113 p. (NIRA 13:4)
(Russia--Economic policy)

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7

KHYZEV, G.

Improve financial planning on state farms. Min.SSR 20
no.10:37-40 0 '59. (MIBA 12:12)
(State farms--Finance)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7"

KNYAZEV, G.

A necessary booklet ("Financing and issuing credit to state farms" by I.A.Movikov. Reviewed by G.Kniashev). Fin.8862 20 no.12:86-87 D '59.
(MIRA 12:12)

1. Zamestitel' nachal'nika otdela finansirovaniya sovmarkhosev
Ministerstva financev RSR.
(State farms--Finance) (Movikov, I.A.)

ENIAZOV, G.

"Auditing the financial operations of the enterprises of a regional economic council." Reviewed by G. Eniazov. Fin.SSR
23 pp.lls:94-95 N '62. (MIA 15:12)

1. Nachal'nik otdela Ministerstva finansov RFRSSR.
(Auditing and inspection)

KNYAZEV, G.A.

USSR/Farm Animals - Swine

Abs Jour : Ref Zhur - Biol., No 15, 1958, 69361

Author : Guseva, K.M., Knyazev, G.A., Kotov, P.P.

Inst : Scientific Research Institute of Agriculture of the
Central Chernozem Belt

Title : Green Fodder for Swine

Orig Pub : Byul. nauchno-tekh. inform. n.-i. in-ta s.-kh. TsChP,
1956, No 1, 41-42

Abstract : No abstract.

Card 1/1

- 45 -

KNYAZEV, O.A., kand. biol. nauk

More on the time of insemination of cows. Zhivotnovodstvo 21 no.8:
76-77 Ag '59. (MIRA 12:11)

1. Direktor vysshikh kursov povysheniya kvalifikatsii zootehnikov
i vetrachey po issledovaniyu osemeneniyu pri Vsesoyuznom institute
zhivotnovodstva.
(Cows) (Artificial insemination)

KYAZEV, G.A.; ROMIN, V.V.; ZAKHAROV-MARTSISSOV, O.I.

Ion-exchange study of the dissociation of Co_2O_4 . Zhur. neorg. khim. 1 no.2:342-344 T '56.
(MLRA 9:10)

(Cobalt oxalates) (Ion exchange)

ZAYTSIEVA, L.L., kand. khim. nauk; LEVSHIN, B.V.; BARANOV, V.I., red.;
KHLOPIN, N.G., red.; KHAZHY, G.A., etv. red.; ARON, G.M., red.
izd-va; BOCHIEV, V.T., tekhn. red.

[Letters from V.O.Khlopin to V.I.Vernadskii, 1916-1943] Pis'ma V.O.
Khlopina k V.I.Vernadskому, 1916-1943. Sost. L.L.Zaytsieva i B.V.Lev-
shin. Pod obshchhei red. V.I.Baranova i N.G.Khlopina, 1961. 88 p.
(MIRA 14:8)

1. Akademiya nauk SSSR. Arkhiv.

(Khlopin, Vitalii Grigor'evich, 1890-1950)

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7

KHAYEV, G.A., VINOGRADOV, Yu.A.

Letter to the editor, Zap. Vses. min. ob-ya 88 no.61734 '59.
(MIRA 13:8)

(Mineralogy) (Archives)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7"

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7

BAKRAKH, A.M.; KNYAZEV, G.A.

V.I.Lenin and the plan of scientific technological work. Izv.vys.
ucheb.zav.; prib. 3 no.2:348 '60. (MIRA 14:4)

(Lenin, Vladimir Il'ich, 1870-1924)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7"

VINOGRADOV, Yu.A., mlad. nauchnyy sotr.; NAGOROVA, Z.N. [deceased];
KNYAZEV, G.A., otd. red.;

[Methodological manual on the technical processing of the papers of
scholars in the Archives of the Academy of Sciences of the U.S.S.R.]
Metodicheskoe posobie po nauchno-tehnicheskoi obrabotke fondov uche-
nykh v Arkhive AN SSSR. Moscow, Izd-vo Akad.nauk SSSR, 1960. 92 p.
(MIRA 14:11)

1. Direktor Arkhiva AN SSSR (for Knyazev).
(Archives—Handbooks, manuals, etc.)

KHLOPIN, Vitaliy Georgievich (1890-1950); ZAITSEVA, L.L.;
LEVSHIN, B.V., KNYAZEV, G.A., otr. red.; BARANOV, V.I.,
red.

[Letters written to V.I.Vernadskii, 1916-1943] Pis'ma k V.I.
Vernadskomu, 1916-1943. Sost.: L.L.Zaitseva i B.V.Levshin.
Pod obahchel red. V.I.Baranova i N.G.Khlopin. Moskva,
Akad. nauk 1961. 88 p. (MIRA 15:9)
(Vernadskii, Vladimir Ivanovich, 1863-1945)

KOPELEVICH, Yu.Kh.; KRUTIKOVA, M.V.; MICHAILOV, G.K.; RAKIN, N.M.;
KHYAZEV, G.A., red.; SMIRNOV, V.I.; YUSHKEVICH, A.P.; TRAVIN,
N.V., red.izd-va; BOCHVER, V.T., tekhn.red.

[Manuscripts of L.Euler's works in the archives of the
Academy of Sciences of the U.S.S.R.] Rukopisnye materialy
L.Eulera v arkhive Akademii nauk SSSR. Moskva, Izd-vo Akad.
nauk SSSR. Vol.1. [Scientific description] Nauchnoe opisanie.
1962. 427 p. (Akademiia nauk SSSR. Arkhiv. Trudy, no.17).
(MIRA 15:4)

(Euler, Leonhard, 1707-1783)

LUKINA, Tat'yana Arkad'yevna; KANAYEV, I.I., prof., retsenzent;
KHIAZEV, G.A., doktor ist. nauk, retsenzent; RAYKOV,
B.Ye., prof., otrv. red.

Ivan Ivanovich Lepakhin. Moskva, Nauka, 1965. 202 p.
(MIRA 18:9)

KNYAZEV, Grigory Ivanovich; MAZURKEVICH, M., red.ind-va; TLEGINA,T.,
tekhn. red.

[Special features of the work analysis of food industry
enterprises] Osobennosti analiza raboty predpriatii pi-
shchevoi promyshlennosti. Moskva, Gosfinisdat, 1963. 102 p.
(MIRA 17:2)

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7

KNYAZEV, G. I.

27202 KNYAZEV, G. I. - Uskorit' Oborachivaemost' Chorotnykh Sredstv. (Vinodel'cheskaya Prom-St.). Vinodelie i Vinogradarstvo SSSR, 1949, No. 8, s. 39-40.

SO: Letopis' Zhurnal'nykh Statey, Vol. 36, 1949.

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7"

KHYZAEV, O. I.

Wine and Wine Making - Accounting

Improving disbursement in wine-making enterprises. Vin. SSSR 12 no. 3, 1952.

9. Monthly List of Russian Accessions, Library of Congress, June 1952. Uncl.

1. KNYAZEV, G. I.
2. USSR (600)
4. Wine and Wine Making--Accounting
7. Correct use of bank credit, Vin. SSSR, 13, No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

KNYAZEV, G.I.

*K'YAZEV, G.I. Cand Geomineral Sci (diss) "Prospecting and Appraisable Criteria
of the yields of the polymetallic deposits in eastern Transbaykal," Irkutsk
1959, 25 pp (Irkutsk Mining Metallurgical Institute)
(K1, 40-60, 121)*

KHYZEV, G.I.

Find of gold in Pre-Cambrian conglomerates of the Argun Valley.
Geol.rud.mestorash. no.31103 19-Je '61. (MIRA 14:6)

1. Chitinskiy filial Tsentral'nogo nauchno-issledovatel'skogo
geologorazvedochnogo instituta.
(Argun Valley—Gold ores)

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7

KNYAZEV, O.I.; TIMOFEEV, B.V.

Stratigraphic position and age of the Merchinskiy Zavod series
in the Argun Valley (eastern Transbaikalia). Trudy VNIGRI
no.186:109-121 '61. (MIRA 15:3)
(Argun Valley—Geology, Stratigraphic)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7"

LITVINENKO, A.U., kand. geol.-miner. nauk, otd. red.; KULAZEV,
G.I., kand. geol.-miner. nauk, red.; KRAVCHENKO, V.M.,
Inzh.-geol., red.; KULINENKO, O.R., inzh.-geolog, red.;
KHRIPKOV, A.V., kand. geol.-miner. nauk, red.; EL'YANOV,
M.D., kand. geol.-miner. nauk, red.; KOROLEVA, T.I., ved.
red.

[Problems of the geology and mineralogy of ore deposits]
Voprosy geologii i mineralogii rudnykh mestorozhdenii.
Moskva, Nedra, 1964. 188 p. (MIRA 17:12)

1. Institut mineral'nykh resursov.

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7

KNYAZEV, G.I.

Closed ore belts in eastern Transbaikalia. Dokl. AN SSSR 160
no. 6:1376-1377 R '65.
(MIRA 18:2)

1. Submitted July 16, 1964.

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7"

KIVAZEV, G.I.

Shortcomings in the intensification of the introduction of new equipment. Mashinostroitel' no.10:39-40 O '65. (MIRA 18:10)

1. Nachal'nik otdela Upravleniya finansirovaniya sovnarkhozov Ministerstva finansov RSFSR.

KNYAZEV, G.I. [Kniaziev, G.I.]; KURELYA, V.E.

Photoelectric properties of galenites. Dop. in URSR no. 12:1616-
1620 '65.
(MIRA 19:1)

1. Institut mineral'nykh resursov i Dnepropetrovskaya gruppa
otdela Instituta mineral'nykh resursov. Submitted December 20,
1964.

30891
S/145/61/000/010/002/008
D221/D304

26.2/95

AUTHOR: Knyazev, G. N., Aspirant

TITLE: On the problem of investigating the dynamics of a servometer influenced by the compressibility of oil and elasticity of piping

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Mashino-stroyenie, no. 10, 1961, 75-84

TEXT: The author investigates the steady motion, when the set of equations has no zero root (the case of one zero root was considered in a previous publication). After defining factors a, b and c, and introducing a feedback,

$$\frac{d^3\eta}{dt^3} + a \frac{d^2\eta}{dt^2} + b \frac{d\eta}{dt} + c\eta + ok, \int_0^t \eta dt = f(\sigma, t);$$

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S/145/61/000/010/002/008
D221/D304

On the problem of investigating ...

$$\sigma = -k_{fb} \left(\eta + T \frac{d\eta}{dt} + k_1 \int_0^t \eta dt \right) \quad (1)$$

is derived where σ is the variation of the spool coordinate; η is the variation of piston coordinate; μ is the flow coefficient; P is the effective surface of piston; γ is the specific weight of oil; l is the length of valve working orifice; p_0 is the difference in pressure between the head and return lines; ξ is the coordinate of spool in the non-excited motion; Δp^* is the pressure drop at the piston in the case of non-excited motion; $g = 981 \text{ cm/sec}^2$; k_{fb} is the feedback coefficient; k is the stiffness factor of pipes and fluid; m is the mass of moving parts and load, reduced to the piston of the servo. It is assumed that the load is independent of time and Eq. (1) is linear. Stability conditions are then derived.

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30891
S/145/61/000/010/002/008
D221/D304

On the problem of investigating ...

The roots of this equation are real and negative when $a(\frac{2p^2}{km} - k_1 a) + c_1(at - 1) > 0$ and $c(at - 1) + a\frac{2p^2}{km} > 0$. After some manipulations, the condition of stability $k_1 T > 0$ is obtained, also $T > \frac{1}{a}$ which is more rigid than the former. This is followed by the analysis of transient motion, by introducing a simplified differential feedback, and assuming no zero root, and $k_1 = 0$. The condition of stability of transient motion in a finite interval requires that the large axis of ellipse does not vary with time. This axis is obtained by solving a cubic equation. On the assumption that the axis is maximum for x_1 , $\frac{dp}{dt} \leq cT - ap - p^2 - 1$. On the assumption $p > 0$, it is derived that coefficients $A_{22} > 0$, $A_{12} > 0$, $A_2 > 0$ and $A_{13} > 0$. A set of conditions is obtained to avoid increase of these coefficients. The type of load determines the stringency conditions, and

Card 3/4

372

S/549/61/000/104/001/018
D237/D304

AUTHORS: Tikhmenev, S.S., Tronina, V.P., Chikin, V.A., Knyazev, G.
N.N. Gulyayev, M.P., Zakharov, Yu.Ye., Chikina, I.S., Lyamin,
V.I., Bocharov, V.K., Shigin, Ye.K., and Krotov, V.P.

TITLE: Scientific, pedagogical and general activities of Professor V.V. Dobronravov

SOURCE: Moscow, Vyssheye tekhnicheskoye uchilishche [Trudy], no.
104, 1961. Mekhanika, 7 - 18

TEXT: On the occasion of his 60th birthday and the 35th anniversary of the scientific and pedagogical activity of Professor, Doctor of Physical and Mathematical Sciences, Vladimir Vasilyevich Dobronravov who is at present Professor of Theoretical Mechanics at MVTU im. N.E. Baumana (MVTU im. N.E. Bauman), eleven of his students present this appreciation. V.V. Dobronravov was born on March 17th, 1901. In 1924 he obtained his degree in mathematics at the Saratovskiy Gosudarstvennyy universitet im. N.G. Chernyshevskiy (Saratov State University im. N.G. Chernyshevskiy). In 1927 he accepted the

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D237/D304

Scientific, pedagogical and ...

post of Assistant to the Professor of Physics at the Astrakhan State Medical Institute, where in subsequent years he published a paper in neuro-biophysics. During 1929-31, he was Professor of Mathematics at the Saratov Agricultural Institute and lectured at Saratov University. From 1931 he worked in a number of higher educational establishments in Moscow and was associated with Moscow University from 1931 to 1952. In 1946 he was awarded a doctorate at Moscow State University and in 1951 he was elected to the Department of Theoretical Mechanics at MVTU im. N.K. Bauman, where in subsequent years, under his guidance, courses in specialized branches such as stability of motion, gyroscopy, oscillation, variational method etc. were developed. During his career the main contributions made were in the field of mechanics of non-holonomic systems. After 1950 he published papers on kinetics of motion of rigid body (Trudy MIKhM, no. 2, (10), 1950), stability of linear systems of diff. equations with constant coefficients in (Avtomatika i Telemekhanika, v. 17, no. 3, 1956) etc. In the 1950's he also became interested in astronautics. He has been a member of the Moscow Mathematical Society since 1944, and is an active member of the Methodological Committee since 1944.

Card 2/3

8/549/61/000/104/001/018
D237/D304

Scientific, pedagogical and ...

sion on the Theoretical Mechanics of the Ministry of the Secondary and Higher Education of USSR. At present he is engaged in preparing a monograph on non-holonomic systems.

ASSOCIATION: Moskovskoye ordena Lenina i ordena trudovogo krasnogo znameni vyssheye tekhnicheskoye uchilishche im. Bauman (Moscow Order of Lenin and Order of the Red Banner of Labor Higher Technical School im. Bauman)

Card 3/3

KNAZEV, O.N., aspirant

Investigating dynamics of a servomotor considering the effect
of oil compressibility and the elasticity of piping. Izv.vys.
ucheb.zav.; mashinostr. no.10:75-84 '61. (MIRA 14:12)

1. Moskovskoye vysokoye tekhnicheskoye uchilishche imeni
Baratina.
(Oil hydraulic machinery)

24.4000

35632
S/549/61/000/104/009/018
D237/D304

AUTHOR: Knyazev, G.N., Aspirant

TITLE: Applicability of Volterra's dynamical equations to non-holonomic systems

SOURCE: Moscow. Vyssheye tekhnicheskoye uchilishche. [Trudy], no. 104, 1961, Mekhanika, 78 - 90

TEXT: The author reviews the classical Volterra derivation of equations of motion of the system with holonomic and non-holonomic restraints, comparing it with the derivation of V.V. Dobronravov (Ref. 3: Uchenyye zapiski MGU, no. 122, v. 2, 1948) and considers whether non-holonomic constraints should be taken into account before or after the transformation of the equations into those of non-holonomic systems. As an example, the author investigates the stability of a gyroscopic frame with two gyroscopes used as a stabilizer in the naval anti-aircraft machine-gun first considered by A.Yu. Tshlinsky (Ref. 10: Mekhanika spetsial'nykh girokopicheskikh sistem (Mechanics of Special Gyroscopic Systems) AS UkrSSR, 1952) shows that f

Card 1/2

Applicability of Volterra's ...

S/549/61/000/104/009/018
D237/D304

the derivation of V.V. Dobronravov is correct, and obtains the stability condition which is stronger than that of A.Yu. Tshlinskiy. The author also shows the full similarity between Chaplygin and Volterra-Dobronravov equations and Hamel type equations. The problem of applicability of non-holonomic constraints remains, however, open. There are 1 figure and 12 references: 8 Soviet-bloc and 4 non-Soviet-bloc.

J

Card 2/2

S/549/61/000/104/010/018
D237/L304

AUTHOR: Knyazev, G.N. Aspirant

TITLE: Investigating stability of the steady motion of a loaded servomotor with feedback, the compressibility of oil being taken into account

SOURCE: Moscow. Vyssheye tekhnicheskoye uchilishche. [Trudy], no. 104, 1961. Mekhanika, 91 - 100

TEXT: The author uses the Lyapunov method to investigate the problem with the following assumptions: Constant pressure and temperature at the point of entry into the valve; absence of leakage from the valve and from the hydromotor; coefficient of the flow of fluid through the valve opening is constant; pressure drop in the hydraulic chambers does not exceed the pressure in the main pipe. The conclusions are: 1) When compressibility of the oil and deformation of pipes are taken into account, then the equation of the hydraulic motor with the feedback contains a 3rd order derivative; hence it remains stable only when the rate of change of the load is limited to ✓

Card 1/2

Investigating stability of the ...

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D237/D304

some value. 2) For the arbitrary rate of change of the load, additional conditions of stability which are only necessary, have to be fulfilled. There are 1 figure and 4 Soviet-bloc references.

Card 2/2

KHIAZEV, G.N., aspirant

Applicability of dynamic Volterra equations to nonholonomic
systems. [Trudy] MVTU no.104:78-90 '61. (MIRA 15:2)
(Dynamics)

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7

KNYAZEV, G.N., aspirant

Investigating the stability of the steady motion of a loaded servomechanism with feedback considering the compressibility of oil. [Trudy] MVTU no.104:91-100 '61. (MIRA 15:2)
(Servomechanisms)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7"

44087

S/145/62/000/008/001/004
D262/D308

26.2190

AUTHOR:

Knyazev, O.N., Engineer

TITLE:

Possibility of applying the equation of hydraulic motor to the investigation of hydroelectrical servo-mechanisms

PERIODICAL:

Izvestiya vyschikh uchebnykh zavedeniy. Mashinostroyeniye, no. 8, 1962, 73-78

TEXT:
The author applies the equation of motion of a hydraulic piston servo-motor with feedback (deduced in his previous papers) with certain simplifications; it is assumed that the following parameters: a) opening of the slide valve, b) drop in pressure on the hydraulic motor plunger, during their undisturbed movements, and c) coefficient of rigid feedback, are constant. As an example the system driving a cross feed saddle of the semi-automatic lathe and profiling machine, model 1722, is investigated. The investigations show that for specific working conditions some servo-mechanisms may be examined making use of integral-and-differential contour.

Card 1/2

KHIAZEV, O.M., inzh.

Stability of a hydraulic control system with two actuating elements. Izv.vys.ucheb.sav.; mashinestr. no.9:110-114 '62.
(MIRA 16:2)

1. Moskovskoye vyscheye tekhnicheskoye uchilishche imeni Baumana.

(Hydraulic control)

L 16111-61

EDS

ACCESSION NR: AP3004615

8/0145/63/000/003/0003/0007

49

AUTHOR: Kivasev, G. M. (Candidate of Technical Sciences)

TITLE: Effect of variable mass on stability of hydromotor

SOURCE: IVUZ. Mashinostroyeniye, no. 3, 1963, 23-27

TOPIC TAGS: stability, feedback, inertia load, piston

ABSTRACT: The stability of a piston hydro-servomotor with a variable mass load was considered. The analysis was done both with and without considering the compressibility effects of the working fluid. The equations of motion are written for a fixed feedback system and linearized by coordinate variation and perturbation expansion. It is assumed that for small piston valve motions the input signal remains constant. The Hurwitz stability criteria is applied to the coefficients and it is found that in the presence of a variable inertia load the motion tends to become unstable. Orig. art. has: 13 equations and 1 diagram.

ASSOCIATION: Khar'kovskiy politekhnicheskiy institut (Kharkov Polytechnic Institute)

Card 1/1

L 21749-66 EMT(d)/EMT(1)/EMP(a)/EMA(d)/EMP(k)/EMP(h)/EMP(1)/ETC(m)-6/EMA(1)
 ACC NR: AP6007544 SOURCE CODE: UR/0198/66/002/001/0033/0045

IJP(c) M

AUTHOR: Kryazhev, A. N. (Khar'kov)

ORG: Kharkov Polytechnic Institute (Kharkovskiy politekhnicheskiy institut) ③

TITLE: On the effect of nonholonomic coupling on mechanical systems 14

SOURCE: Prikladnaya mehanika, v. 2, no. 1, 1966, 35-45

TOPIC TAO3: Lagrange equation, nonholonomic state, holomorphic function, kinetic energy, potential energy, equilibrium configuration, stability criterion

ABSTRACT: The effect of superposing an ideal nonholonomic coupling on fully dissipative mechanical systems is investigated. To this end, the generalized equation of dynamics is written as

$$\sum_{i=1}^n \left(\frac{d}{dt} \cdot \frac{\partial T}{\partial q_i} - \frac{\partial T}{\partial \dot{q}_i} + \frac{\partial V}{\partial q_i} + \frac{\partial f}{\partial q_i} \right) \delta q_i = 0,$$

where the kinetic and potential energies are holomorphic functions and are expressed by

$$2T = \sum_{i=1}^n \dot{q}_i^2 + \sum_{i,j} A_{ij} q_j; \quad 2V = \sum_{i,j} B_{ij} q_j + \sum_{i,j,k} \Phi_{ijk} q_j.$$

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L 21749-66

ACC NR: AP6007544

A set of linear, stationary, ideal, nonholonomic couplings are superimposed on the above system, leading to two nonholonomic systems: a Boltzmann-Hamel system and Chaplygin equations. Both weak and strong nonholonomic cases are considered, and the following conclusion is arrived at. A weakly nonholonomic coupling (linear, ideal) reinforces the system towards nonasymptotic stability and weakens the asymptotic stability of the zeroth equilibrium configuration. A strong nonholonomic coupling, on the other hand, just weakens the asymptotic stability of the zeroth equilibrium configuration. To illustrate this, two examples are considered: the steady flow of an incompressible fluid under potential volume forces and the rolling motion of two spheres, one inside the other. Orig. art. has 21 equations.

SUB CODE: 20, 12/SUBM DATE: 12Nov64/ ORIG REF: 008

Cord 2/2 JV

L 41940-66 EWT(d)/EMT(n)/T/EMT(1) IJP(c) DJ/IC
ACC NR: AT6018768

SOURCE CODE: UR/0000/65/000/000/0080/0003

AUTHOR: Knyazev, G. N.

55

B+1

ORG: none

TITLE: Cavitation phenomena in hydraulic servomechanisms

SOURCE: AN SSSR, Institut avtomatiki i telemekhaniki. Gidroavtomatika (Hydraulic automation). Moscow, Izd-vo Nauka, 1965, 80-83

TOPIC TAGS: hydraulic device, cavitation, servomechanism

ABSTRACT: V. A. Khokhlov (Avtomatika i telemekhanika, 18, No 9, 1967) investigated the stability of hydraulic executor mechanisms containing strong feedback with an inertial load acting on the piston. Using the usual assumptions, Khokhlov presented an approximate derivation of the formula for critical (from the cavitation viewpoint) mass determination for the hydraulic mechanism shown in Fig. 1. The present paper offers an exact derivation of the same formula. Orig. art. has: 12 formulas and 3 figures.

Card 1/2

L 45940-66
ACC NR. AT6018768

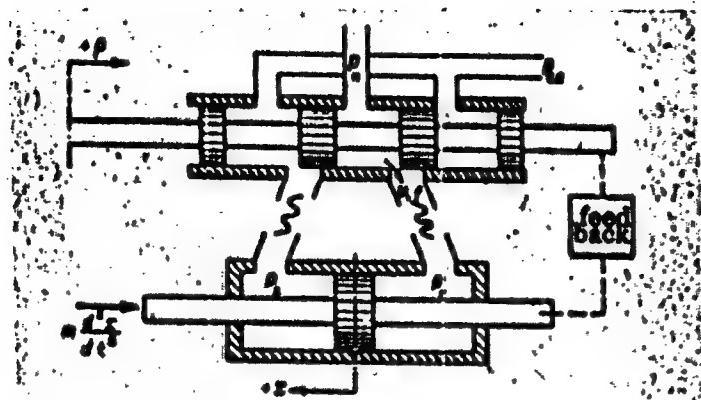


Figure 1. Circuit of a hydraulic executor mechanism

SUB CODE: 13,20/ SUBM DATE: 26Nov86/ ORIG REF: 001

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CIA-RDP86-00513R000723330006-7

KHIAZEV, G.S.

The dual vertical photographic wave recorder. Trudy Mor. idro-
fiz. inst. AN URR 3:54-62 '64 (MIRA 18:2)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723330006-7"

KNYAZEV, Ivan Aleksandrovich; LIVSHITS, Ya.L., red.; NAZAROVA, A.S.,
tekhn. red.

[The 15th anniversary of the independence of India] 15 let ne-
zavisimosti Indii. Moskva, Izd-vo "Znanie," 1962. 31 p. (Novoe
v shkoli, nauke, tekhnike, VII Seriya: Mezhdunarodnaya, no.11)
(MIRA 15:6)
(India--Economic conditions)

KNYAZEV, I. I.

AID P - 1526

Subject : USSR/Electricity

Card 1/1 Pub. 26 - 22/36

Author : Knyazev, I. I., Eng.

Title : Reconstruction of platforms of an unloader of an enclosed coal storage bin.

Periodical : Elek. sta., 3, 50-51, Mr 1955

Abstract : The author describes and illustrates the reconstruction done at one of the electric power stations, fuelled with culm. One drawing.

Institution: None

Submitted : No date

KNYAZEV, I.I.

TOZHESKII, D.V.; ANDRIANOV, A.S.; CHYSLER, A.N.; GOLUBYATNIKOV, V.D.;
[deceased]; DOMAROV, V.S.; DOMINIKOVSKII, V.N.; DOVZHIKOV, A.Ye.;
ZAITSEV, I.K.; IVANOV, A.A.; ITSIKOV, M.I.; IL'INOV, N.P., ~~KNYAZEV~~,
I.I.; KORZHENKOVSKAYA, A.S.; MISHAKOV, D.T.; SEDOV, A.I.; SHCHER-
ZENKO, N.I.; SHTRODOV, Ye.I.; RADZHEKHO, G.P.; SROGINSKIY, V.M.;
SOLOV'YEV, A.T.; TALTYKIN, S.I.; UMEBOV, V.A.; KHABAKOV, A.Y.;
TSIKHOMSKIY, A.N.; CHUPILIN, I.I.; SHATALOV, Ye.Z., glavnyy redak-
tor; KRASNIKOV, V.I., redaktor; MIRLIN, O.A., redaktor; KURANOV, B.S.,
redaktor; POTAPOV, V.S., redaktor izdatel'stva; GUREVA, O.A., tekhnicheskiy redaktor.

[Instructions for organization and execution of geological surveys
in scales of 1:50,000 and 1:25,000] Instruktsii po organizatsii
i perevodistvu geologo-s'emechnykh rabot na skatobor 1:50,000 i
1:25,000. Moscow, Gos. nauchno-tekhn. i d-vs lit-yy po geol. i
okhrane nadr. 1956. 373 p. (MLR 10:6)

1. Russia (1923- U.S.S.R.) Ministerstvo geologii i okhrany nadr.
(Geological surveys)

PREPALIN, S.R.; DUVASHIN, I.I.

Effect of various diets on the dynamics of glucose absorption by
the small intestine in radiation sickness. Vop. pit. 18 no.4:
34-41 Jl-Ag '59. (MIRA 12:10)

1. In Moscowvskogo instituta gigiyeny imeni F.F.Brieman.
(DIETS, eff.

in small intestine glucose absorp. in exper.
radiation sickness (Rus))

(GLUCOSE, metab.

small intestine absorp. in exper. radiation
sickness, eff. of diets (Rus))

(INTESTINE, SMALL, physiol.

glucose absorp. in exper. radiation sickness,
eff. of diets (Rus))

(RADIATION RATS, eff.

glucose absorp. by small intestine in exper.
radiation sickness, eff. of diets (Rus))

VELIKYI, A.S., KNYAZEV, I.I., KUNGAN, A.S.

Distribution of complex metal deposits in the Sarysu-Balkhash-Bura watershed. Truly VINITI 32:129-203 '60. (MIRA 13:11)
(Kazakhstan—Ore deposits)

L 47480-56 EWT(1)/EBC(k)-2/EWP(k)/r IJP(s) NO
ACC NR: AP6030716

SOURCE CODE: UR/0368/68/005/002/0178/0187

AUTHOR: Knyazev, I. N.

37
33
B

ORG: none

TITLE: Spectral composition of the pulse generation of N_2 molecules in the transition $^3\pi_g(B) \rightarrow ^3\Sigma_u^+(A)$.

SOURCE: Zhurnal prikladnoy spektroskopii, v. 5, no. 2, 1988, 178-187

TOPIC TAGS: spectral line, molecular spectrum, molecular nitrogen, laser tube, excitation energy, electron impact

ABSTRACT: More than 90 new laser lines on 6 bands of the first positive system of molecular nitrogen are reported by the author, in addition to ~ 30 lines reported earlier. Most of these lines are assigned to rotational-vibrational transitions in the $[^3\pi_g \rightarrow ^3\Sigma_u^+]$ system. A d-c pulse excitation of a 1.2 m and 1.5 cm ID laser tube is employed. Relative intensities of some laser lines are measured. An excitation mechanism of rotational structure is discussed on the basis of the assumption of direct electron impact from the ground state and on the Franck-Condon principle. For qualitative comparison with experiments, the relative ampli-

Card 1/2

UDC: 543.42

Card 2/2

L JOURNAL FBD/EWT(L)/EEC(k)-2/T/EWT(k) IJP(e) WC

ACC NR: AP6019656 SOURCE CODE: UR/0368/66/004/006/0560/0561

AUTHOR: Knyazev, I. N.; Petrush, G. G.

ORG: none

TITLE: Pulsed generation in pure neon on the $2p_1 - 1s_4$ transition, $\lambda = 5400 \text{ \AA}$

SOURCE: Zhurnal prikladnoy spektroskopii, v. 4, no. 6, 1966, 360-361

TOPIC TAGS: microwave generator, quantum generator, gas laser

ABSTRACT: Pulsed laser action on the green line in pure neon is described and a probable mechanism for the formation of population inversion is given. The generation was observed at a neon pressure of 0.3 to 10 mm Hg. Optimum pressure was about 4-4.5 mm Hg. The laser, which was of standard design, was excited by high-voltage (up to 35 kv) pulses. A discharge tube with an inner diameter of 15 and 7.5 mm and an active length of 125 cm was used. The generation was observed at the beginning of the current pulse. The pulse duration was about 100 nsec. The gain, which was determined with the aid of absorbing filters placed in the cavity, reached 2 to 3 per meter. The measurements showed that the generation line coincided approximately with the neon line at $\lambda = 5400.56 \text{ \AA}$, corresponding to the $2p_1 - 1s_4$ transition. At not too small currents the $2p$ levels of neon are not occupied by transitions from the ground level, but primarily from the $1s$ levels. From this group of levels, $1s_2$ and $1s_4$ are resonance levels and $1s_3$ and $1s_5$ are metastable levels. It is supposed that

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